

COLLEGE OF ENGINEERING

CHEMICAL AND BIOLOGICAL ENGINEERING BOOT CAMP

OPEN TO HIGH SCHOOL STUDENTS IN GRADES 10-12

December 20-22, 2022 | 10:00 a.m.–1:00 p.m. American University of Sharjah campus

Discover what it's like to work in the exciting fields of chemical and biological engineering through this special three-day boot camp for high school students. At this informative and engaging camp, you will:

- learn more about chemical and biological engineering
- discover the manufacture of products through chemical and biological processes
- enjoy hands-on activities our state-of-the-art chemical and biological engineering laboratories
- enhance your communication and teamwork skills
- make new friends with similar interests
- receive a certificate of attendance
- enjoy an unforgettable campus experience at AUS

DAY 1 | TUESDAY | DECEMBER 20, 2022

Learn about Chemical and Biological Engineering

Students will:

- perform site visits and become familiar with all the chemical and biological engineering labs and equipment
- observe the demonstrations of distillation, pump station, cooling tower and reverse osmosis (RO) desalination unit
- watch short videos related to chemical and biological engineering industries and fields

DAY 2 | WEDNESDAY | DECEMBER 21, 2022

Synthesize Chemical and Biological Engineering Products

Students will learn about the raw materials and the processes involved in the production of pharmaceutical and personal care products. Using batch experiments and natural ingredients in the laboratory, students will synthesize products such as soap, shampoo, etc. Also, students will synthesize the nonsteroidal anti-inflammatory medicine aspirin. Students will also visit the AUS Library.

DAY 3 | THURSDAY | DECEMBER 22, 2022

More Chemical and Biological Engineering Processes

Students will learn about different industrial processes in addition to hands-on experiments. Chemical reactors and solid-liquid separation will be demonstrated. Students will also explore interesting experiments about the adsorption of dyes on activated charcoal and drug release from hydrogel beads. Students will also visit the AUS Student Center.

REGISTER NOW!

Seats are limited

Cost: Free of charge, but students will be selected according to their statement of interest and according to our available capacity.

Registration Deadline: December 11, 2022

To register: Visit <u>www.aus-chebootcamp.com</u> or contact Ms. Aileen Yulay at ayulay@aus.edu; 06 515 2167